CLAIMS

1/ Means for holding two pieces in position that are to be moved towards each other along at least two extreme coplanar docking directions (D1, D2) that form a docking angle (β) between them, the position-holding means being characterized in that it comprises firstly at least a male and a female V (19, 20) each provided with means for fixing to a respective one of the pieces so that each V is centered substantially on a direction parallel to the bisector of the docking angle, the female V possessing an inlet portion (20.1) having an aperture angle (α 1, α) not less than the docking angle, and secondly means (23, 24) for pressing the male V against the female V along said bisector.

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2/ Position-holding means according to claim 1, characterized in that the Vs (19, 20) have aperture angles (α) that are substantially equal and greater than the docking angle (β).

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3/ Position-holding/means according to claim 2, characterized in that for a docking angle (β) of about 90°, the aperture angles (α) of the Vs (19, 20) are equal to about 120°.

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4/ Position-holding means according to claim 1, characterized in that the female V (20) possesses an end portion (20.2) having an aperture angle (α 2) substantially equal to the aperture angle of the male V (19) which is not less than the docking angle (β), and in that the aperture angle (α 1) of the inlet portion (20.1) of the female V is greater than the aperture angle (α 2) of the end portion (20.2) thereof.

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5/ position-holding means according to claim 4, characterized in that, for a docking angle (β) substantially equal to 90°, the aperture angle (α 2) of

the male V and of the end portion (20.2) of the female V (20) is substantially equal to 90°, and the aperture angle (α 1) of the inlet portion (20.1) of the female V (20) is substantially equal to 120°.

6/ Position-holding means according to any one of claims 1 to 5, characterized in that the means for pressing the Vs together comprise a peg (23) projecting from the male V (19) symmetrically relative thereto so as to be inserted into an elongate slot (22) formed in the female V (20) and having a major axis contained in the plane of the docking direction, at least one jaw (24) being movably mounted on the peg (23) to be actuated between an active position in which it forms an abutment for a rear face (26) of the female V facing away from the male V, and an inactive position in which it is retracted and allows the peg to pass freely through the slot of the female V.

7/ Apparatus for assembling bodywork, the apparatus comprising two side tools (14) supporting body sides (2) and a tool (11) extending transversely relative to the two side tools, the apparatus being characterized in that it comprises means (18) according to any preceding claim for holding the side tools and the transverse tool in position relative to one another, the transverse tool having at least two Vs (19) disposed symmetrically about a longitudinal axis of the bodywork and designed to cooperate with corresponding Vs (20) fixed to the side tools.

8/ Apparatus according to claim 7, as dependent on claim 3 or claim 5, characterized in that the bisector (\underline{b}) of the aperture angles (α) of the Vs (19, 20) forms an angle of about 45% with the longitudinal axis of the bodywork.

9/ Apparatus according to claim 7 or claim 8, characterized in that the Vs secured to the transverse tool (11) are male Vs (19) and the Vs secured to the side tools (14) are female Vs (20).

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